

DATE: November 22, 2010

TO: RMC Governing Board

FROM: Belinda V. Faustinos, Executive Officer

SUBJECT: Item 11: Consideration of a resolution authorizing a grant to the Watershed Conservation Authority for the Azusa Springs Water System, River Wilderness Park (RMC10011)

PROGRAM AREA: Rivers/Tributaries

JURISDICTION: City of Azusa

PROJECT MANAGER: Marybeth Vergara

RECOMMENDATION: That the RMC authorize a grant in the amount of \$460,000 to the Watershed Conservation Authority for the Azusa Springs Water System, River Wilderness Park using the urgency criteria (RMC10011).

BACKGROUND: When the El Encanto River Wilderness Park property was purchased in 2006, the Azusa Springs Water Distribution system was part of the property currently owned and operated by the Watershed Conservation Authority. Shortly after the acquisition, WCA staff was notified by the County of Los Angeles Department of Health Services of several corrections that needed to take place in order to bring the system up to date and consistent with the requirements for a Community Water System. This water system provides water to the RMC/WCA offices as well as the 3 unit residential units on site. The water is obtained through a potable ground water well under the direct influence of surface water. See Exhibit C-Site Map.

This grant is an urgency request by the Watershed Conservation Authority which will provide an immediate improvement to the Azusa Springs Water System which is critical to the continued park operations at the River Wilderness Park in Azusa. The requested funding will allow the WCA to make the necessary corrections to the water system using an approved method recommended by the LA County Department of Health Services. The water filtration system will meet all state required specifications for surface water application. Currently the WCA utilizes the services of the ECS Company to perform the duties of running and oversight of the water system. The contract Rangers and WCA staff assist in this process by testing the water for chlorine and turbidity on a daily basis. The new filtration system will have automatic backwash capability, turbidity meter and Chlorine analyzer controlled alarm callout and shut down functions. This new system will reduce the staff costs associated with the current manual testing process as well as the services provided by ECS.

In addition, this grant includes the costs associated with the building refurbishment and site preparation to move the current water system to an indoor building, formerly known as the mobile home "laundry room." The WCA will continue to research additional public and private funding opportunities to allow the River Wilderness Park to eventually connect to the City of Azusa Water system. In 2009, the WCA applied for a planning grant in the amount of \$144,500 from the Safe Drinking Water State Revolving Fund Program. That application was recently updated for funding consideration and is still active with the State Revolving Fund Program. Additional sources of potential matching funds will be researched, since it is expected that the projected cost for connection to the City of Azusa will easily exceed \$1,000,000.00.

The Azusa Springs Water System is defined as a community Water System by the County of Los Angeles Department of Health Services. The California Health and Safety code requires that any changes to the Water System must be submitted for approval by the Department of Health Services (Section 116550 (a)). The code further requires that the water supplier demonstrate that it possesses the technical, managerial and financial (TMF) capability to deliver pure, wholesome, potable water (Section 116540 (a)).

Approval of this action will allow the WCA to award a contract to Waterworks Technology Inc. for installation of a water filtration system at the River Wilderness Park in Azusa. The total cost for the delivery and assembly of all components, design engineering, installation, permitting as well as two days of training for WCA staff is \$270,000. See attached Exhibit A- Tasklist, Timeline & Budget and Exhibit B- Proposal from Waterworks Technology Inc. and Exhibit C- Site Map.

URGENCY: The Urgency Criteria as adopted on January 22, 2007 is as follows:

1. A delay in recommending the action will result in loss of a matching funds opportunity.
2. A delay in recommending the action will result in a lost opportunity for projects which are already part of a RMC programmatic objective.
3. A delay in recommending the action will result in a lost opportunity to apply for other funds to promote RMCs programmatic and policy objectives.

The Watershed Conservation Authority is requesting funds in the amount of \$460,000 in order to bring the water system up to date as per the LA County Department of Health Services, and consistent with the requirements for a Community Water System. A delay in replacing the water filtration system and related improvements could cause public health problems related to water quality including taste/odor, color, turbidity or suspended solids.

FISCAL INFORMATION: This action authorizes a grant in the amount of \$460,000 to cover the costs of installing a new water filtration system at the River Wilderness Park in Azusa (\$270,000) as well as the building refurbishment including site preparation, water connection re-routing/replacement, communications upgrades, WCA project management/ services and contingency, totaling \$150,000. This amount includes an additional \$20,000 contingency for any unexpected costs that may arise associated with the installation, design, permit fees, or unexpected delays and/or technical problems that may arise. The total grant amount will be for \$460,000.00 See attached Exhibit A- Tasklist, Timeline & Budget.

Funding for this project will be allocated from the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act of 2000 (Proposition 13) allocation.

LEGISLATIVE AUTHORITY AND RMC ADOPTED POLICIES/AUTHORITIES:

On April 24, 2003 the RMC adopted Resolution 03-11 authorizing a Joint Powers Agreement between the RMC and the Los Angeles County Flood Control District establishing the Watershed Conservation Authority created for the purposes of providing a comprehensive program to expand and improve the open space and recreational opportunities for the conservation, restoration and environmental enhancement of the San Gabriel and Lower Los Angeles Rivers Watershed area consistent with the goals of flood protection, water supply, groundwater recharge and water conservation.

Section 32602: There is in the Resources Agency, the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, which is created as a state agency for the following purposes:

- (b) To preserve the San Gabriel River and the Lower Los Angeles River consistent with existing and adopted river and flood control projects for the protection of life and property.
- (d) To provide for the public's enjoyment and enhancement of recreational and educational experiences on public lands in the San Gabriel Watershed and Lower Los Angeles River, and the San Gabriel Mountains in a manner consistent with the protection of lands and resources in those watersheds.

Section 32614: The conservancy may do all of the following:

- (b). Enter into contracts with any public agency, private entity, or persona necessary for the proper discharge of the conservancy's duties, and enter into a joint powers agreement with a public agency, in furtherance of the purposes set forth in Section 32602.
- (e). Enter into any other agreement with any public agency, private entity, or person necessary for the proper discharge of the conservancy's duties for the purposes set forth in Section 32602.

Further, Section 32614 provides that: The Conservancy may do all of the following:

- (g) Undertake, within the territory, site improvement projects, regulate public access, and revegetate and otherwise rehabilitate degraded areas in consultation with any other public agency with appropriate jurisdiction and expertise, in accordance with the purposes set forth in Section 32602. The conservancy may also, within the territory, upgrade deteriorating facilities and construct new facilities as needed for outdoor recreation, nature appreciation and interpretation, and natural resources protection. The conservancy may undertake those projects by itself or in conjunction with another local agency; however, the conservancy shall provide overall coordination of those projects by setting priorities for the projects and by ensuring a uniform approach to projects. The conservancy may undertake those projects with prior notification to the legislative body of the local agency that has jurisdiction in the area in which the conservancy proposes to undertake that activity.

**River Wilderness Park Water Filtration System Update
Tasklist, Timeline Budget**

Item 11: Exhibit A- Tasklist, Timeline Budget

		River Wilderness Park	Start	Estimated Completion		Budget by Task
Deliverable	Task	Phase 1 Task				
Water Filtration System-Water Works	1	Planning & Implementation	12/10	03/11		\$ 270,000.00
Design Engineering						
Installation, Permitting, and Training						
Building Refurbishment (Laundry Room)	2	Refurbishment	12/10	03/11		\$ 50,000.00
Site preparation (concrete pads)						\$ 8,000.00
Electrical Upgrades						\$ 4,000.00
Water Connections & Improvements (re-routing/replacing pipes, well improvements, and related items)						\$ 35,000.00
Communications upgrades	3	IT upgrades, compatible w/WCA Offices	02/10	04/11		\$ 5,000.00
Contingency						\$ 18,000.00
WCA Project Mgmt & Services						\$ 70,000.00
		TOTAL				\$ 460,000.00

We are submitting you our quote to install a water filtration system at your Azusa Canyon facility. The Filtration system shall meet all state required specifications for surface water application. Please note that the price includes delivery and assembly of all components. Inclusive also is two days of training for your operations staff during permit approval. This quote only includes the filtration equipment below and does not include scada or any other tele-monitoring equipment. This quote is based on sampling results from 2008. A full Title 22 analytical test must be performed on the source water prior to filter design. This quote is for budgetary recommendations, per your request.

1 Design Concept

The proposed design is a standard EPD two stage pressure filter system with one filter vessels in the first stage and one filter vessels in the second stage. The system will have Automatic backwash capability, turbidity meter and Chlorine analyzer controlled alarm callout and shutdown functions.

Each vessel is a 50 PSI steel; epoxy lined and has 8.2 square feet of filter area.

Control function is via the programmable Logic Controller (PLC) based EPD Aquatic Intelligence Control System (AICS).

1. Raw water enters upstream piping* where it is injected with coagulant through a static mixer.
2. Water then enters the first stage (roughing) filter. Effluent of the first stage is monitored by the first stage turbidity meter which drives coagulant feed to the first stage.
3. Upon exiting the first stage the water enters the second stage (polishing) filter and is injected with coagulant based on the effluent of the second stage.
4. If water quality meets the requirements based on the alarm set points then water is allowed into storage through the effluent valve.
5. Continuous monitoring of the effluent water turbidity from the second stage turbidity meter gives the system the "turn out" to waste function if turbidity alarm set point is reached. If this user defined set point is reached the system opens the rinse valve and closes the effluent valve for a user defined period of time, if that time is exceeded then the system automatically forces the second stage filter to backwash in an attempt to correct the problem.
If after the forced backwash, the system corrects effluent turbidity readings it will go back on line opening the effluent valve and closing the rinse to waste valve.

If system does not recover, it will automatically shut down and, if equipped with auto dialer or SCADA connection will call out the alarm notification.

6. Automatic backwashing occurs when differential pressure set points are reached, user defined times that are programmed into the AICS are reached or system is manually put into backwash.
7. All backwash functions are followed by rinse to waste function for quick recovery.
8. On systems less than 200 GPM, finished water is stored either in the Clear well, finished water storage tank or designated backwash water storage tank to supply the needed amount of backwash water required at an accelerated rate.

1.1 Design Basis

The quoted design concept is based on written and verbal information from the November 12, 2008 Proposal by Watershed Conservation Authority

Source:	Surface water
Flow Rate:	10,000 GPD
Raw Water Turbidity:	Unknown
System Pressure:	Unknown
Site Area:	Azusa Canyon

2 Scope of Supply

Only equipment listed will be supplied for the price quoted.

Systems consists of tanks, 3-way valves, Backwash sight-glass valves, manual butterfly valves, manifold piping, tubing for instruments and combination vacuum\air relief fittings and PLC controls.

Section 2.1 FILTERS, PUMPS, VALVES and PIPING

No.	Equipment	Part No.	Qty.
1.	8.2 sq.ft Steel epoxy lined filter tank	2-0010-011	2
2.	3-way bronze backwash valves	2-0020-171	4
3.	Backwash Sight-glass Valve	2-0020-179	2
4.	2- tank influent manifold	Custom	1
5.	2- tank effluent manifold	Custom	1
6.	2-tank waste manifold	Custom	1
7.	4" Grooved couplings Victaulic type	384-1022	8
8.	3" Manual Butterfly Valves	xxx-xxxx	2
9.	3" Elec. Actuated Valves	xxx-xxxx	3
10.	24V Solenoid Valves	2-0014-062	2

Section 2.2 MEDIA and CHEMICALS

No.	Equipment	Part No.	Qty.
1.	50X Garnet media (55 lb bags)	2-0020-085	28
2.	60\80 Garnet media (55 lb bags)	2-0020-138	28
3.	A410P Coagulant (600 lb drum)	2-0020-189	1

Section 2.3 CONTROLS and INSTRUMENTATION			
No.	Equipment	Part No.	Qty.
1.	Aquatic Intelligence Control System (AICS) Consists of: PLC, Input\ output modules, Press. Amp contactor control relays, terminal blocks 24VDC power supply and OIT	303-2100	1
2.	Turbidity meter Panel Consists of: 2 Hach 1720E turbidity meter All interconnecting wiring to AICS	2-0014-216	1
3.	Chlorine Analyzer Hach CL17 or equal	2-0020-326	1
4.	Gauge panels	1100-1621	2

Section 2.4 CHEMICAL PUMPS and MIXING			
No.	Equipment	Part No.	Qty.
1.	Coagulant pumps LMI B9 series pumps includes suction and injection Check valves and supply tubing.	2-0020-195	2
2.	Chlorine Pump LMI or equal	2-0020-196	1
3.	Static mixer Flanged 3" TAH brand or equal	2-0020-190	1
4.	20 gal. Chlorine holding tank Snyder dual containment or equal	2-0020-329	1

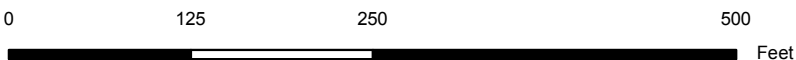
PRICING

Quote good for 30 days

Filtration system	\$155,000.00
Design Engineering	50,000.00
Installation, Permitting and training	<u>65,000.00</u>
 Total:	 \$270,000.00



Exhibit C: Project Map



Watershed Conservation Authority

Governing Board

Teresa Villegas,

Chair

Designee for Gloria Molina
Los Angeles County Board of
Supervisors, 1st District

Dan Arrighi

Rivers and Mountains
Conservancy

Frank Colonna

Rivers and Mountains
Conservancy

Vacancy

Rivers and Mountains
Conservancy

Karly Katona

Designee for Mark Ridley-
Thomas
Los Angeles County Board of
Supervisors, 2nd District

Brian Mejia,

Vice Chair

Designee for Michael D.
Antonovich
Los Angeles County Board of
Supervisors, 5th District

Curtis Pedersen

Designee for Don Knabe
Los Angeles County Board of
Supervisors, 4th District

Edward Wilson

Rivers and Mountains
Conservancy

Gail Farber

Director
Los Angeles County
Department of Public Works

Belinda V. Faustinos

Executive Officer

November 14, 2010

Belinda V. Faustinos
Executive Officer
Rivers and Mountains Conservancy
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702

Re: Request for Funds for Water Filtration System, River
Wilderness Park, Azusa

Dear Ms. Faustinos:

The Watershed Conservation Authority is requesting a grant in the amount of \$460,000.00 in order to bring the water system up to date as per the LA County Department of Health Services, and consistent with the requirements for a Community Water System. A delay in replacing the water filtration system and related improvements could cause public health problems related to water quality including taste/odor, color, turbidity or suspended solids.

This requested amount of \$460,000 will cover the costs of installing a new water filtration system at the River Wilderness Park in Azusa (\$270,000) as well as the building refurbishment including site preparation, water connection re-routing/replacement, communications upgrades, WCA project management services and contingency, totaling \$150,000. This amount includes an additional \$20,000 contingency for any unexpected costs that may arise associated with the installation, design, permit fees, or unexpected delays and/or technical problems that may arise. See attached Exhibit A- Tasklist, Timeline & Budget.

Sincerely,



Teresa Villegas,
Chair

Enclosure(s)

TV:mtv

L: Projects/Water System/WCA Letter Requesting Funds for Water System
update Nov 2010.doc

Watershed Conservation Authority • 100 N. Old San Gabriel Canyon Road • Azusa, CA 91702

Phone: (626) 815-1019 • Fax: (626) 815-1269 • E-mail: bfaustinos@rmc.ca.gov

www.wca.ca.gov

November 22, 2010 – Item 11

RESOLUTION 2010-85

RESOLUTION OF THE SAN GABRIEL AND LOWER LOS ANGELES
RIVERS AND MOUNTAINS CONSERVANCY (RMC) AUTHORIZING A
GRANT TO THE WATERSHED CONSERVATION AUTHORITY FOR
THE AZUSA SPRINGS WATER SYSTEM, RIVER WILDERNESS PARK
(RMC10011)

WHEREAS, The legislature has found and declared that the San Gabriel River and its tributaries, the Lower Los Angeles River and its tributaries, and the San Gabriel Mountains, Puente Hills, and San Jose Hills constitute a unique and important open space, environmental, anthropological, cultural, scientific, educational, recreational, scenic, and wildlife resource that should be held in trust to be preserved and enhanced for the enjoyment of, and appreciation by, present and future generations; and

WHEREAS, The voters of the the State of California passed the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Bond Act of 2000 (Proposition 13) on March 7, 2000; and

WHEREAS, The Legislature and Governor of the State of California have appropriated funds under Proposition 13 for the River Parkway Grant Program;

WHEREAS, the River Parkway Grant Program was established to fund projects related to the acquisition and restoration of riparian habitat, riverine aquatic habitat, and other lands in close proximity to rivers and streams; river and stream trail projects, or river parkway projects undertaken by a state agency, city, county, or pursuant to a joint powers agreement between two or more of these entities; and

WHEREAS, the Watershed Conservation Authority is requesting a grant in the amount of \$460,000 for the Azusa Springs Water System at the River Wilderness Park in Azusa; and

WHEREAS, The proposed grant request is exempt from the provisions of the California Environmental Quality Act (CEQA); and NOW

Therefore be it resolved that the RMC hereby:

1. FINDS that this action is consistent with the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy Act and is necessary to carry out the purposes and objectives of Division 22.8 of the Public Resources Code.
2. FINDS that the grant is consistent with the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Bond Act of 2000 (Proposition 13).
3. APPROVES a grant to the Watershed Conservation Authority in the amount of \$460,000 for the Azusa Springs Water System, River Wilderness Park (RMC10011).
4. ADOPTS the staff report dated November 22, 2010.

~ End of Resolution ~

Adopted by the Board of the
SAN GABRIEL AND LOWER LOS ANGELES RIVERS AND MOUNTAINS
CONSERVANCY on November 22, 2010

Frank Colonna, Chair

ATTEST:

Terry Fujimoto
Deputy Attorney General